

Meeting Notes: Community Advisory Group - Aerojet Superfund Issues, March 21, 2006

1. Attendees

Charles Berrey (USEPA, Aerojet RPM), Alex MacDonald (Regional Water Quality Control Board), Jackie Lane (EPA), Tricia Carter (Recorder, CH2M HILL), Paul Schubert (GSWC), Janis Heple, Vicki Lee, Jean Young (SCWA), Larry Ladd, George Waegell, John Hervey, Tom Gray (Fair Oaks Water District), Mike Girard (Aerojet), Mike Benbow (GSWC), Kimee Kim

2. Approval of Meeting Minutes

The meeting minutes were accepted as final. No comments were provided.

3. Update on major milestones and deliverables produced since the May meeting for OU3 and other environmental related efforts at Aerojet, Charles Berrey, EPA

Charles updated the CAG on recent OU-3 activities/deliverables. Since the last meeting, the following has been completed:

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Status Aerojet Operable Unit 3 Since 1/17/06 Meeting

01/31/06	The Agencies responded to Aerojet's 1/31/06 document "GET H Effectiveness Evaluation" and requested response to comments within 30 days. Aerojet provided response to comments 3/06/06. The Agencies responded 3/15/06 requesting within 30 days justification for 200 ft/day vs. 75 ft/day hydraulic conductivity value near CalAm water supply wells (possible under predicting CalAm water supply well operation impact).
02/06/06	The Agencies approved Aerojet's document "Ultraviolet Destruction of N-Nitrosodimethylamine (NDMA) Work Plan".
02/09/06	The EPA notified Aerojet that its 01/12/06 document "OU3 Disposal Notification" met Superfund requirements.
02/14/06	The Agencies requested Aerojet resubmit its 01/27/06 document "NDMA Reformation Draft Work Plan" within 21 days as a Prefinal/Final document addressing the Agencies comments (American River sampling and provide 5 To Be Determined table specifications).
02/28/06	The Agencies supported Aerojet's adding additional upgradient Layer C and D extraction in Area 1 per its 2/10/2006 document "Draft Hydrologic Modeling Performed in Support of Area 1 GET Design." The Agencies requested Aerojet review as part of the 3/31/06 Model design placing the Layer C and D extraction wells a little further to the west near White Rock Road and Sunrise Blvd.
03/15/06	Aerojet submitted 3/15/06 its document "Draft Groundwater Zone Plan for Area 1" indicating no impact on GET H remedy from operation of CalAm's Chettenham, Rockingham, Swansea, and Winchester water supply wells; and Golden Sate Water Company's wells 18 and 23. The Agencies' response is pending on this document.
03/21/06	The Agencies granted Aerojet's 120 days or 30 days beyond conclusion of the proposed testing of the Chettenham Well extension request for submission of the "Short and Long-term Water Replacement Contingency Plans." No objection was received from CalAm.

Other Aerojet Environmental Efforts Since 1/17/06 Meeting

01/27/06	The EPA notified Aerojet that CH2M HILL will be the EPA's technical support contractor for Source Area OUs.
02/21/06	The Agencies' requested response to comments within 30 days on Aerojet's 1/31/06 document "Material Modification Project Schedules for Zones 1, 3, and 4" (before shutting down American River extraction wells perform an effectiveness evaluation of the American River Groundwater Extraction and Treatment System; prior to approval of the location of extraction wells Z3-C2 and D2 to protect Teichert's water supply well 1943 Aerojet needs to provide the Agencies a capture zone analysis; and additional details need to be added to the work schedule).
02/28/06	EPA requested response to comments with 30 days on Aerojet's draft 1/31/06 document "Draft White Paper – Human Health Risk Assessment – Source Area OUs."
02/28/06	EPA had no comments on Aerojet's 1/31/06 document "Draft White Paper – Ecological Risk Assessment – Source Area OUs."
02/28/06	EPA requested response to comments within 30 days on Aerojet's 1/31/06 document "Draft Biological Resource Assessment for Aerojet Boundary Operable Unit."
03/07/06	The Agencies requested Aerojet respond to comments within 30 days on Aerojet's 2/08/06 document "Report on the Calibration of the Johnson and Ettinger (J&E) Model for Use at the Aerojet Sacramento Site" (how best to apply J&E model data to Aerojet site).
03/14/06	EPA provided comments on remedy groundwater use for former Sacramento Army Depot and former Mather USAF Base and Aerojet Superfund Sites in response to the document "February 2006 Central Sacramento County Groundwater Management Plan."
03/15/2006	Aerojet submitted 3/15/06 its response to the Agencies' 1/20/06 comments on the "Perimeter Groundwater Operable Unit Remedial Investigation/Feasibility Study." The Agencies comments are pending.

Charles took the action to provide the CAG with a copy of the letter that relates to the 03/14/06 item under Other Aerojet Environmental Efforts (Remedy groundwater use for former Sacramento Army Depot and former Mather USAF Base and Aerojet Superfund Sites).

4. Update on Well Installation Activities in OU-3 and Beyond, Alex MacDonald, RWQCB

Alex noted Aerojet is completing the Remedial Investigation and Feasibility Study for the Boundary Operable Unit. New monitoring wells are being installed as part of this effort. Alex referred to the first of two handouts depicting the location of the Boundary OU, the Carveout area and the location of new monitoring wells. The second handout showed the location of the groundwater extraction treatment (GET) systems and the location of new monitoring wells as of March 2006. Aerojet's two interim GET H's are operational and are pumping/treating groundwater in OU3. The two long-term GET H facilities (Boeing GET H and Aerojet GET H) are not yet operational. These facilities will replace the Aerojet interim GET H facilities and the Boeing Interim EX-5 facility. The Boeing GET H is under construction and will commence operation soon and the Aerojet GET H will be operational in June or July. Those two GET H facilities will be located adjacent to one another on Mather Field. Two extraction wells have been installed at GET L and are ready to operate pending construction of the treatment systems and pipelines.

5. Discussion of UCLA Rocketdyne Occupational Study, Larry Ladd

Larry Ladd presented on the toxicology of some of the common contaminants that are addressed

during the CAG meetings and as part of the ongoing Aerojet cleanup activities. Larry provided three handouts summarizing various studies that have recently been published. The first handout summarized the estimated effects of hydrazine exposure on cancer incidence and mortality in aerospace workers. Hydrazine, once exposed to air, converts to NDMA and can therefore metabolize easily in the lungs. The study investigated pathways and other areas where this cancer can develop. Paul asked about the dosage rates. It was noted that the data are based on occupational health data and that the study was conducted and published with contributions from the Department of Health Services.

The second handout summarized the estimated effects of solvents and mineral oils on cancer incidence and mortality in a cohort of aerospace workers. The results observed for TCE and kidney cancers are consistent with findings of previous studies. Larry noted that his issue is the potential for there to be other contaminants that are not currently being tracked (i.e. kerosene).

The third handout included maps of census tracts at high risk and maps adjusted for social class for malignant melanoma, mesothelioma, adenocarcinoma of the lung and bronchus, papillary carcinoma of the thyroid, stomach non-hodgkin lymphomas, and neurolemoma. These maps depicted the spatial coincidence of these cancer occurrences. Larry noted that the key is the timing of the exposure to NDMA and perchlorate.

Charles asked Larry what his key concerns were in relationship to the Operable Units and cleanup levels based on his presentation. Larry noted that he has no issues with the cleanup levels today and noted that he is more concerned about past exposure and the issues this may cause. Larry requested the data from the TIC analysis. Charles stated that the data is on public record in the Groundwater Monitoring Plan for 1999. Mike Girard took the action to provide Larry with this data.

6. Overview of Wellhead Treatment Systems – Selection and Utilization Process, Paul Schubert, GSWC

Paul Schubert described the permitting process (97-05 permit) to implement a wellhead treatment system at Marcel well #5 that meets all drinking water standards. The contract was just recently signed to start the 97-05 process to permit the well and the well location. Paul recapped by stating that a letter must be prepared if the detection in a well is above the notification level (6 ppb), and DHS recommends that a well or source be removed from service if the detection in the well is above the response level. A 97-05 permit is usually written when using a well that is ten times the MCL. Paul is taking a conservative approach by moving forward with this process because an MCL has not been established for perchlorate.

Several steps of the permitting process include source water assessment, identification of chemicals in the area, future impacts, characterization of water quality, etc. Paul noted that the treatment systems will not be permitted to operate until this process is completed. Once completed and approved, this well will be fully permitted for domestic services. The public is also involved in this process and has the opportunity to review the permit during a 30-day public comment period. The evaluation period is yet to be determined.

7. Next Meeting.

The CAG is considering changing its meeting date from the third Tuesday of every other month to the fourth Wednesday and also the meeting location if a better place can be found that allows making advance reservations. Reservations are limited to a month in advance for the Sheriff's substation.

Next meeting: Wednesday, May 24, 2006, Sheriff's substation, Community Room, 10361 Rockingham Way (just off Mather), Rancho Cordova, 7 p.m. to 9 p.m.